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EXAMINER	
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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/698,894	Applicant(s) CODEN ET AL.
	Examiner Fred I. Ehichioya	Art Unit 2172

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____ .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1 - 33 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1 - 33 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2 .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other:

DETAILED ACTION

Claim Objections

1. The numbering of claims is not in accordance with 37 CFR 1.126 which requires the original numbering of the claims to be preserved throughout the prosecution. When claims are canceled, the remaining claims must not be renumbered. When new claims are presented, they must be numbered consecutively beginning with the number next following the highest numbered claims previously presented (whether entered or not).

Misnumbered claims 1 - 23, 25 - 34 have been renumbered 1 - 33.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

3. Claims 1, 2, 4, 5, 7, 10, are rejected under 35 U.S.C 102(e) as been anticipated by Ford et al. (U.S. Patent 6,272,457).

Regarding claim 1, Ford et al. teaches a method for providing collateral information for inclusion with an information stream, comprising steps of:

Examining the information stream to recognize a presence of events that occur in the information stream (see column 2, lines 34 -36).

Automatically generating database queries from recognized events (see column 2, lines 31 - 47).

Analyzing database query results so as to rank and select database query results to be inserted into the information stream as collateral information (see column 4, lines 47 - 49).

Regarding claim 2, Ford et al. teaches the claimed subject matter as discussed in claim 1.

Ford et al. further teaches wherein the step of analyzing comprises a step of ranking the database query results based on a plurality of criteria (see column 6, lines 61 - 67 and column 7, lines 1 - 2).

Regarding claim 4, Ford et al. teaches the claimed subject matter as discussed in claim 1.

Ford et al. further teaches wherein the database queries are automatically generated based on information corresponding to a list that identifies topics in text that is automatically extracted from the information stream, where the topics correspond to predetermined topic taxonomies (see column 5, lines 39 - 45 and column 8, lines 7 - 9).

Regarding claim 5, Ford et al. teaches the claimed subject matter as discussed in claim 1.

Ford et al. further teaches wherein the step of examining comprises a step of automatically extracting text from the information stream (see column 8, lines 47 - 52).

Regarding claim 7, Ford et al. teaches the claimed subject matter as discussed in claim 5.

Ford et al. further teaches wherein the step of automatically extracting text from the information stream comprises a step of operating a voice recognition system (see column 5, 8 - 9).

Regarding claim 10, Ford et al. teaches the claimed subject matter as discussed in claim 5.

Ford et al. further wherein teaches wherein the step of automatically extracting text from the information stream comprises a step of also generating text that is descriptive of a number of human faces that are present in an image conveyed by the information stream (see column 5, lines 3 - 7).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 3, 6, 8, 9, 11, are rejected under 35 U.S.C. 103(a) as being unpatentable over Ford et al. (U.S. Patent: 6,272,457) in view of Allen James et al. (U.S. Publication: Topic Detection and Tracking Pilot Study Final Report, 1998).

Regarding claim 3, Ford et al. teaches the claimed subject matter as discussed in claim 2.

Ford et al. does not teaches wherein the plurality of criteria comprise a score derived from a free text search of the database using text that is automatically extracted from the

information stream, on a number of named entities appearing in the text and in the database query results, and on a taxonomy path score, where the taxonomy path score represents an amount of relatedness between a taxonomy-related information element found in the text and a predetermined taxonomy tree.

However, Allen James et al. teaches wherein the plurality of criteria comprise a score derived from a free text search of the database using text that is automatically extracted from the information stream, on a number of named entities appearing in the text and in the database query results, and on a taxonomy path score, where the taxonomy path score represents an amount of relatedness between a taxonomy-related information element found in the text and a predetermined taxonomy tree (see Page 199, column 11, section **"Discourse Based HMM Segmentation"**).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Ford et al. by teaching of Allen James et al. wherein the plurality of criteria comprise a score derived from a free text search of the database.

The concepts of Allen James et al. as outlined in Page 198, column 10, section **2.3 Umass Approach** of the publication, teaches claim 3; Allen James et al. teaches the plurality of criteria comprise a score derived from a free text search of the

database using text that is automatically extracted from the information stream (a method for automatic expansion of ad hoc queries for information retrieval. It is somewhat like the method of local feedback [5] but has been shown to be more effective and more robust for the segmentation task). Allen James et al. also teaches segmentation task addresses the problem of automatically dividing a text stream into topically homogeneous blocks, The motivation for this capability in this study arises from the desire to apply event tracking and detection technology to automatically generated transcriptions of broadcast news (see page 196, column 5, section **"Segmentation"**).

Regarding claim 6, Ford et al. teaches the claimed subject matter as discussed in claim 5.

Ford et al. further teaches wherein the step of examining further comprises steps of (see column 8, lines 65 - 67):

Ford et al. does not teach segmenting the text into sentences; and Operating on the sentences to identify topics that correspond to predetermined topic taxonomies, wherein the step of automatically generating database queries operates on identified topics.

However Allen James et al. teaches wherein the step of examining further comprises steps of: segmenting the text into sentences; and operating on the sentences to identify topics that correspond to predetermined topic taxonomies, wherein the step of automatically generating database queries operates on identified topics (see page 198, column 10, section **"Umass Approach"**).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Ford et al. by teaching of Allen James et al. wherein segmenting the text into sentences; and operating on the sentences to identify topics that correspond to predetermined topic taxonomies is achieved by UMass approach. Consequently, this approach is more effective and more robust which makes it easy for each sentence to be run as a query against the database.

Regarding claim 8, Ford et al. teaches the claimed subject matter as discussed in claim 5.

Ford et al. does not teach wherein the step of automatically extracting text from the information stream comprises a step of extracting closed caption text.

However, Allen James et al. teaches wherein the step of automatically extracting text from the information stream comprises a step of extracting closed caption text (see Publication page (see page 198, column 9, section **TWA Corpus**).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to induct the segmenter goes through the process of extracting text before returning errors on the closed-caption data. Consequently, since the close-caption data contains punctuation mark, it makes it possible to introduce sentence break in the usual way.

Regarding claim 9, Ford et al. teaches the claimed subject matter as discussed in claim 5.

Ford et al. does not teach wherein the step of automatically extracting text from the information stream comprises a step of operating a character recognition system.

However, Allen James et al. teaches wherein the step of automatically extracting text from the information stream comprises a step of operating a character recognition system (see page 196, column 5, section **"Segmentation"**).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Ford et al. by teaching of Allen James et al. wherein

segmentation task addresses the problem of automatically dividing a text stream into topically homogeneous blocks, The motivation for this capability in the study arises from the desire to apply event tracking and detection technology to automatically generated transcriptions of broadcast news.

Regarding claim 11, Ford et al. teaches the claimed subject matter as discussed in claim 5.

Ford et al. does not teach claim 11.

However, Allen James et al. teaches wherein the step of examining the information stream further comprises steps of segmenting the text into sentences and a step of operating on the sentences to identify topics that correspond to predetermined topic taxonomies and the presence of names of entities, and further comprising steps of assembling a list comprised of an identified topic having a start time and an end time, as well as any named entities that occur between the start time and the end time, assembling a query object comprised of named entities that occur between the start time and the end time of the identified topic, searching at least one database to identify a first set of stored documents that correspond to the topic, identifying a subset of the first set of documents that contain the named entities, identifying a second set of

documents that correspond to words found in the text; scoring the returned documents based on a plurality of criteria and ranking the documents based on their scores (see page 197, column 7, section "**Dragon Approach**").

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Ford et al. by teaching of Allen James et al. wherein at a certain level of abstraction, identifying topics in a text stream is similar to recognizing speech in acoustic stream. Consequently, Identifying the sequence of topics in an unbroken transcript therefore corresponds to recognizing phonemes in a continuous speech stream.

6. Claims 12, 15, 16 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ford et al. (U.S. Patent: 6,272,457) in view of Bunce et al. (U.S. Patent: 5,970,460).

Regarding claim 12, Ford et al. teaches a method for providing collateral information for multiplexing with an information stream, comprising steps of:

Converting the information stream into text (see column 9, lines 6 - 8).

Analyzing the text to identify information elements (see column 2, lines 29 - 41)

Ford et al. does not teaches automatically generating queries from the information elements for searching at least one database; extracting data from database search results that is relevant to the information stream; and multiplexing the data into the information stream for presentation at a destination of the information stream.

However, Bunce et al. teaches automatically generating queries from the information elements for searching at least one database (see column 6, lines 48 - 52).

Extracting data from database search results that is relevant to the information stream (see column 6, lines 61 - 65).

Multiplexing the data into the information stream for presentation at a destination of the information stream (see column 7, lines 52 - 60).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Ford et al. by teaching of Bunce et al. wherein tentative entry is created in the database. This facilitates the storing of characterizing information if the user then corrects or changes the text using voice commands.

Regarding claim 15, Ford et al. and Bunce et al. teach the claimed subject matter as discussed in claim 12.

Ford et al. does not teach wherein the queries are generated based on information elements that correspond to a list of information elements identifying topics in the text being analyzed, where the topics correspond to predetermined topic taxonomies.

However, Bunce et al. teaches wherein the queries are generated based on information elements that correspond to a list of information elements identifying topics in the text being analyzed, where the topics correspond to predetermined topic taxonomies (see column 6, lines 48 - 67 and column 7, lines 1 - 2).

Regarding claim 16, Ford et al. and Bunce et al. teach the claimed subject matter as discussed in claim 12.

Ford et al. further teaches wherein the step of analyzing the text comprises steps of segmenting the text into sentences and a step of operating on the sentences to identify topics that correspond to predetermined topic taxonomies, and wherein the step of automatically generating queries operates on identified

topics (see column 7, lines 63 - 67; column 8, lines 1 - 9, lines 47 - 53 and column 13, lines 27 - 34).

Regarding claim 17, Ford et al. and Bunce et al. teach the claimed subject matter as discussed in claim 12.
Ford et al. further teaches wherein the step of analyzing the text comprises steps of at least segmenting the text into sentences (see column 13, lines 27 - 34).
Identifying names of entities within the text, and a step of operating on the sentences to identify topics that correspond to predetermined topic taxonomies (see column 13, lines 34 - 45).
Wherein the step of automatically generating queries operates on identified topics and ranks the database search results based at least on numbers of named entities found and on an amount of relatedness between a taxonomy-related information element identified in the text and a predetermined taxonomy tree (see column 8, lines 7 - 26).

7. Claims 13 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ford et al. (U.S. Patent: 6,272,457) in view of Allen James et al. (U.S. Publication: Topic Detection and Tracking Pilot Study Final Report, 1998) and further in view of Bunce et al. (U.S. Patent: 5,970,460).

Regarding claim 13, Ford et al. and Bunce et al. teaches the claimed subject matter as discussed in claim 12.

Ford et al. does not teach wherein the step of extracting comprises a step of ranking the extracted information based on a plurality of criteria, and where the step of multiplexing uses the ranked data.

Allen James et al. teaches wherein the step of extracting comprises a step of ranking the extracted information based on a plurality of criteria, and where the step of multiplexing uses the ranked data (see page 205, column 23, section **"Group-average based clustering"**).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Ford et al. and Bunce et al. by teaching of Allen James et al. wherein the ranking the extracted information based on sorting the TDT stories, dividing the partition, applying GAC to each bucket, removing bucket boundaries and repeating the steps. The process of raking enables similar events to be grouped according to their classifications.

Regarding claim 14, Ford et al. and Bunce et al. teaches the claimed subject matter as discussed in claim 12.

Ford et al. does not teach wherein the step of extracting comprises a step of ranking extracted document information based on a score derived from a free text search of a document database using the text, on a number of named entities extracted from the text that are found in the documents, and on a taxonomy path score, where the taxonomy path score represents an amount of relatedness between a taxonomy-related information element identified in the text and a predetermined taxonomy tree.

However Allen James et al. teaches the step of extracting comprises a step of ranking extracted document information based on a score derived from a free text search of a document database using the text, on a number of named entities extracted from the text that are found in the documents, and on a taxonomy path score, where the taxonomy path score represents an amount of relatedness between a taxonomy-related information element identified in the text and a predetermined taxonomy tree (see page 206, column 25, section **"The UMass Approach"**, last two paragraphs of the section).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Ford et al. and Bunce et al. by teaching of Allen James et al. wherein steps of ranking extracted document information

is based on a score and aging factor. Consequently, an event is less likely to be considered as time passes.

8. Claims 18 - 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bunce et al. (U.S. Patent: 5,970,460) in view of Moran et al. (U.S. Patent: 5,786,814).

Regarding claim 18, Bunce et al. teaches a system for providing collateral information for inclusion with an information stream, said system operating in real time or substantially real time and comprising:

A subsystem for examining the information stream to recognize a presence of events that occur in the information stream (see column 1, lines 63 - 67 and column 2, lines 1 - 3).

A subsystem, having an input coupled to an output of said examination subsystem, for automatically generating database queries from recognized events (see column 2, lines 3 - 5).

A database for receiving said database queries (see column 1, lines 63 - 67)

Bunce et al. does not teaches a subsystem, having an input coupled to an output of said database, for analyzing database query results so as to rank and select database query results to

be inserted into the information stream as collateral information.

However, Moran et al. teaches a subsystem, having an input coupled to an output of said database, for analyzing database query results so as to rank and select database query results to be inserted into the information stream as collateral information (see column 3, lines 12 - 40).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Bunce et al. by teaching of Moran et al. wherein the a system for providing collateral information for inclusion with an information stream is attained. The process also produces speech/audio event database, which can be used as an index into diction event database for commands correcting previously misrecognized diction event.

Regarding claim 19, Bunce et al. and Moran et al. teaches the claimed subject matter as discussed in claim 18.

Bunce et al. further teaches wherein the analyzing subsystem employs ranking criteria comprised of a score derived from a free text search of the database using text that is automatically extracted from the information stream, on a number of named entities appearing in the text and in the database

query results, and on a taxonomy path score, where the taxonomy path score represents an amount of relatedness between a taxonomy-related information element found in the text and a predetermined taxonomy tree, and wherein the query generation subsystem generates queries based on information corresponding to a list that identifies topics in the text that is automatically extracted from the information stream, where the topics correspond to elements of the taxonomy tree (see column 2, lines 66 - 67; column 3, lines 1 - 22 and lines 59 - 67; column 4, lines 1 - 14).

Regarding claim 20, Bunce et al. and Moran et al. teaches the claimed subject matter as discussed in claim 18.

Bunce et al. further teaches wherein said examining subsystem comprises at least one unit for automatically extracting text from the information stream, a unit for segmenting the text into sentences and at least one unit for operating on the sentences to identify topics that correspond to predetermined topic taxonomies, wherein said query generation subsystem automatically generates database queries based at least in part on identified topics (see column 5, line 44 - 67; column 6, lines 11 - 18 and lines 48 - 52).

Regarding claim 21, Bunce et al. and Moran et al. teaches the claimed subject matter as discussed in claim 20.

Bunce et al. further teaches wherein said text extracting unit comprises at least one of a voice recognition system, a system for extracting closed caption text, and a character recognition system (see column 1, lines 41 - 49 and column 6, lines 13 - 18).

Regarding claim 22, Bunce et al. and Moran et al. teaches the claimed subject matter as discussed in claim 20.

Bunce et al. does not teach wherein said examining subsystem comprises a unit for generating text that is descriptive of a number of human faces that are present in an image conveyed by the information stream.

However, Moran et al. teaches wherein said examining subsystem comprises a unit for generating text that is descriptive of a number of human faces that are present in an image conveyed by the information stream (see column 22, lines 29 - 33).

Regarding claim 23, Bunce et al. and Moran et al. teaches the claimed subject matter as discussed in claim 20.

Bunce et al. does not teach further comprising a unit for operating on the sentences to identify the presence of names of entities.

Further comprising a unit for assembling a list comprised of an identified topic having a start time and an end time, as well as any named entities that occur between the start time and the end time.

Where the query generation subsystem assembles a query object comprised of named entities that occur between the start time and the end time of the identified topic for searching said database to identify a first set of stored documents that correspond to the topic, a subset of the first set of documents that contain the named entities.

A second set of documents that correspond to words found in the text.

And where said analyzing subsystem scores the returned documents based on a plurality of criteria and ranks the documents based on their scores.

However, Moran et al. teaches further comprising a unit for operating on the sentences to identify the presence of names of entities (see column 16, lines 7 - 9).

Further comprising a unit for assembling a list comprised of an identified topic having a start time and an end time, as

well as any named entities that occur between the start time and the end time (see column 16, lines 9 - 15 and column 21, lines 54 - 60).

And where the query generation subsystem assembles a query object comprised of named entities that occur between the start time and the end time of the identified topic for searching said database to identify a first set of stored documents that correspond to the topic, a subset of the first set of documents that contain the named entities (see column 16, lines 33 - 42).

A second set of documents that correspond to words found in the text (see column 16, lines 38 - 39).

And where said analyzing subsystem scores the returned documents based on a plurality of criteria and ranks the documents based on their scores (see column 16, lines 26 - 45).

9. Claims 24, 25, 26, 31, 32 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bunce et al. (U.S. Patent: 5,970,460) in view of Ford et al. (U.S. Patent: 6,272,457).

Regarding claim 24, Bunce et al. teaches a computer-implemented method for generating collateral

information from an audio/video stream (see column 2, lines 66 - 67 and column 3,lines 1 - 18).

Bunce et al. does not teach comprising steps of examining the audio/video stream to recognize a presence of events that occur in the audio/video stream.

Generating database queries from recognized events, and analyzing database query results so as to rank and select database query results to be presented as the collateral information.

However, Ford et al. teaches comprising steps of examining the audio/video stream to recognize a presence of events that occur in the audio/video stream (see column 2, lines 34 - 36).

Generating database queries from recognized events (see column 1 31 - 47). Analyzing database query results so as to rank and select database query results to be presented as the collateral information (column 4, 47 - 49).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Bunce et al. by teaching of Ford et al. wherein a computer-implemented method for generating collateral information from an audio/video stream is attained. The system also produces speech/audio event database in association with editing program and also contains text items entered by the

speech recognition system. These text items can be operated on by way of addition or deletion.

Regarding claim 25, Bunce et al. and Ford et al. teach the claimed subject matter as discussed in claim 24.

Bunce et al. does not teach wherein further comprising a step of inserting the collateral information into the audio/video stream in real time or substantially real time.

However, Ford et al. teaches wherein further comprising a step of inserting the collateral information into the audio/video stream in real time or substantially real time (see column 5, lines 8 - 15 and lines 39 - 42).

Regarding claim 26, Bunce et al. and Ford et al. teaches the claimed subject matter as discussed in claim 24.

Bunce et al. further teaches wherein the step of examining includes a step of generating a speech transcript from at least the audio portion of the audio/visual stream, and wherein recognized events comprise speech topics (see column 2, lines 44 - 53).

Regarding claim 31, Bunce et al. and Ford et al. teach the claimed subject matter as discussed in claim 24.

Bunce et al. further teaches wherein the database queries are automatically generated based on information corresponding to identified topics extracted from the audio/video stream, where the topics correspond to predetermined topic taxonomies (see column 6, lines 48 - 59 and column 7, lines 27 - 32).

Regarding claim 32, Bunce et al. and Ford et al. teach the claimed subject matter as discussed in claim 24.

Bunce et al. further teaches wherein the step of examining includes steps of generating a speech transcript comprised of words from at least the audio portion of the audio/visual stream (see column 2, lines 44 - 53).

Segmenting the words into sentences; and operating on the sentences to identify topics that correspond to predetermined topic taxonomies, wherein the step of generating database queries operates on identified topics (see column 5, line 44 - 67; column 6, lines 11 - 18 and lines 48 - 52).

Regarding claim 33, Bunce et al. teaches a computer readable media having recorded thereon a program for providing collateral information for inclusion with an information stream (see column 2, lines 66 - 67 and column 3,lines 1 - 18), the program comprising instructions for examining the information

stream to recognize a presence of events that occur in the information stream (see colunm3, lines 15 - 23),

Bunce et al. does not teach for automatically generating database queries from recognized events; and for analyzing database query results so as to rank and select database query results to be inserted into the information stream as collateral information.

However, Ford et al. teaches for automatically generating database queries from recognized events (see column 2, lines 31 - 47); and for analyzing database query results so as to rank and select database query results to be inserted into the information stream as collateral information (see column 4, lines 47 - 49).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Bunce et al. by teaching of Ford et al. wherein a computer readable media having recorded thereon a program for providing collateral information for inclusion with an information stream. As is conventional this system incorporates a video display, keyboard and a mouse for providing interaction with the system user.

10. Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bunce et al. (U.S. Patent: 5,970,460) in view of Ford et al. (U.S. Patent: 6,272,457) and further in view of Allen James et al. (U.S. Publication: Topic Detection and Tracking Pilot Study Final Report, 1998).

Regarding claim 27 Bunce et al. and Ford et al. teaches the claimed subject matter as discussed in claim 24.

Bunce et al. does not teach wherein the audio/visual stream originates as a television broadcast signal.

However, Allen James et al. teaches wherein the audio/visual stream originates as a television broadcast signal (see page 196, columns 5 and 6, sections **"Segmentation" and "Evaluation"**).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Bunce et al. and Ford et al. by teaching of Allen James et al. wherein the audio/visual stream originates as a television broadcast signal.

11. Claims 28, 29, 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bunce et al. (U.S. Patent: 5,970,460) in view of Ford et al. (U.S. Patent: 6,272,457) and further in view of Moran et al. (U.S. Patent: 5,786,814).

Regarding claim 28, Bunce et al. and Ford et al. teaches the claimed subject matter as discussed in claim 24.

Moran et al. further teaches wherein the audio/visual stream originates at a meeting, and further comprising a step of presenting the collateral information to meeting participants in real time or substantially real time (see column 5, lines 25 - 60).

Regarding claim 29, Bunce et al., Ford et al. and Moran et al. teaches the claimed subject matter as discussed in claim 28.

Bunce et al. further teaches wherein the step of presenting comprises a step of inserting the collateral information into the audio/video stream, and displaying the audio/video stream to the meeting participants (see column 6, lines 22 - 35, column 7, lines 3 - 14 and lines 46 - 61).

Regarding claim 30, Bunce et al., Ford et al. and Moran et al. teach the claimed subject matter as discussed in claim 28.

Bunce et al. teaches further comprising a step of archiving at least the collateral information (see column 6, lines 61 - 67 and column 7, lines 1 - 2).

Conclusion

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Fred I. Ehichioya whose telephone number is 703-305-8039. The examiner can normally be reached on M - F 8:00 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Vu can be reached on 703-305-4393. The fax phone numbers for the organization where this application or proceeding is assigned are 703-746-7239 for regular communications and 703-746-7238 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-303-3900.

FE
November 5, 2002

JEAN M. CORRIELUS
PRIMARY EXAMINER